


Medication delivery pen with improved dosage setting.

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Cited Documents: US4973318; DE4013769; US3815785

Abstract

An injection device (10) is provided for injecting fluids such as insulin within body tissue. The device includes a housing (20), a piston rod movably mounted within the housing, and a dose setting mechanism for controlling the movement of the piston rod with respect to a fluid containing cartridge removably positioned within the housing. The dose setting mechanism includes a units counter ring (36) and a tens counter ring (38). A transmission key (44) is provided for selectively coupling the units and tens counter rings so that they rotate together only during selected portions of the dose setting procedure. The piston rod includes a plunger (22) and a lead screw (26) slidably positioned within the plunger. The plunger and lead screw are coupled by a pair of half nuts (28). The half nuts may be uncoupled from the lead screw in order to allow it to slide freely with respect to the plunger. A new cartridge (46) may accordingly be installed quickly and easily as the lead screw is easily displaced by a new cartridge. 

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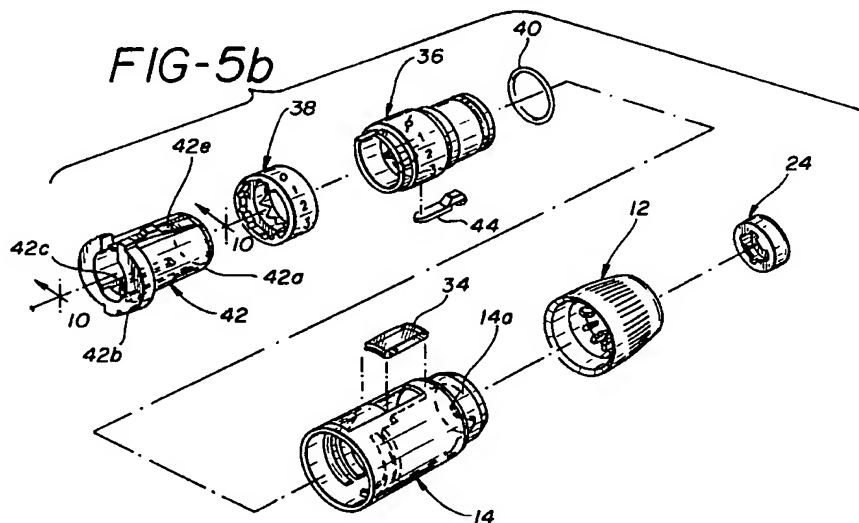
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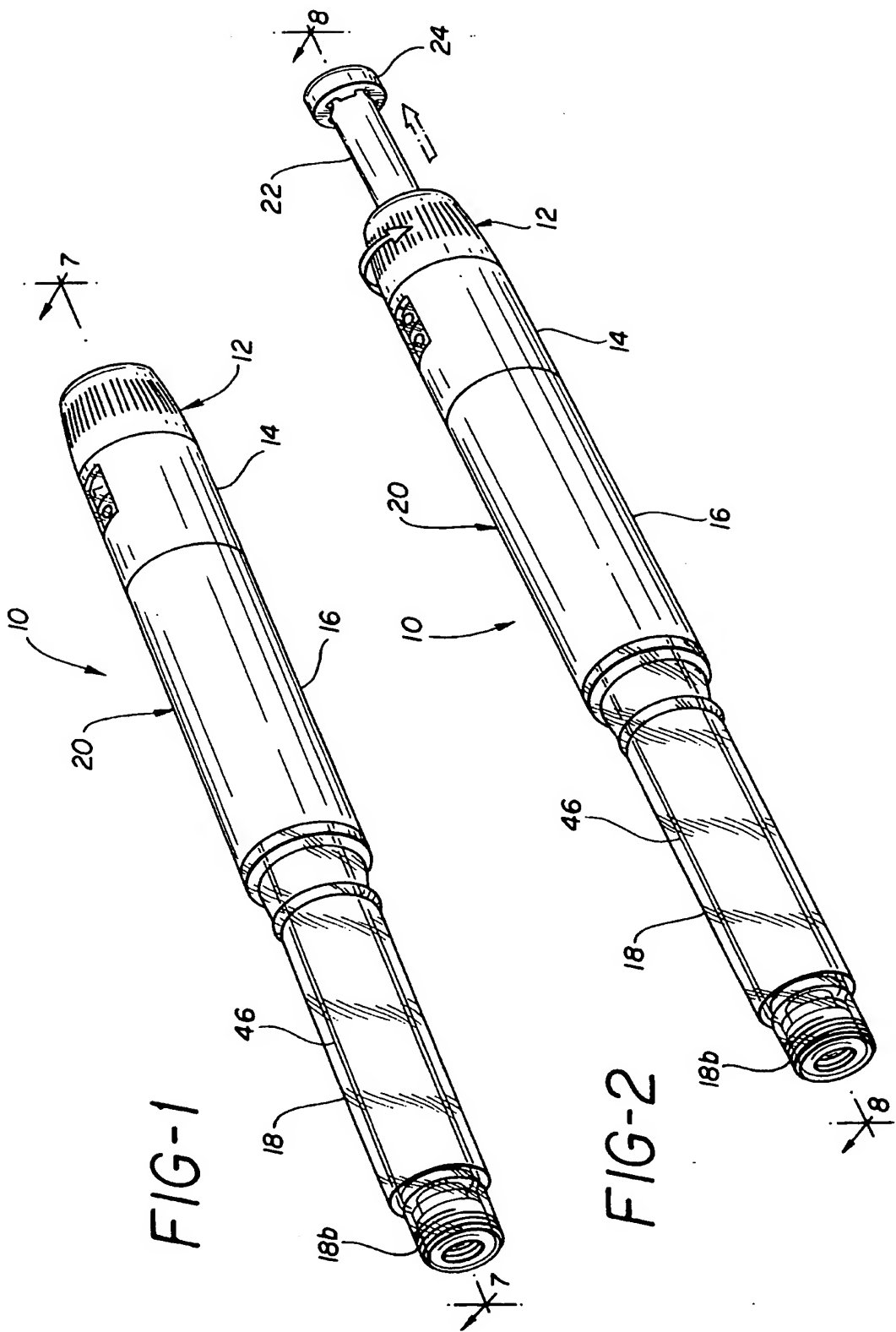
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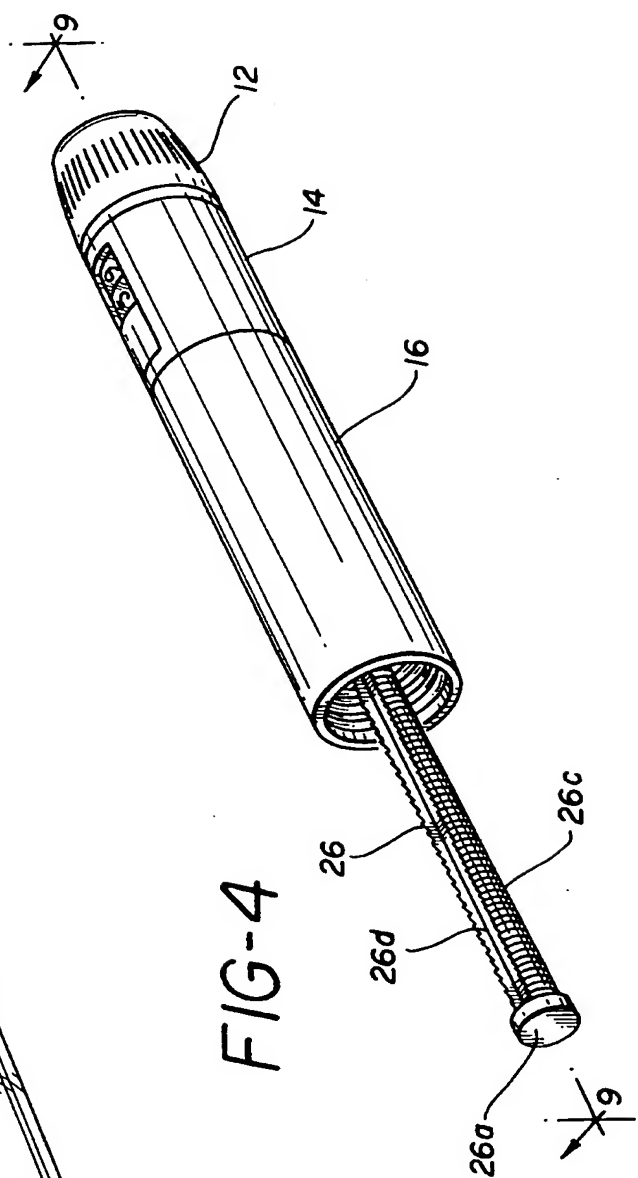
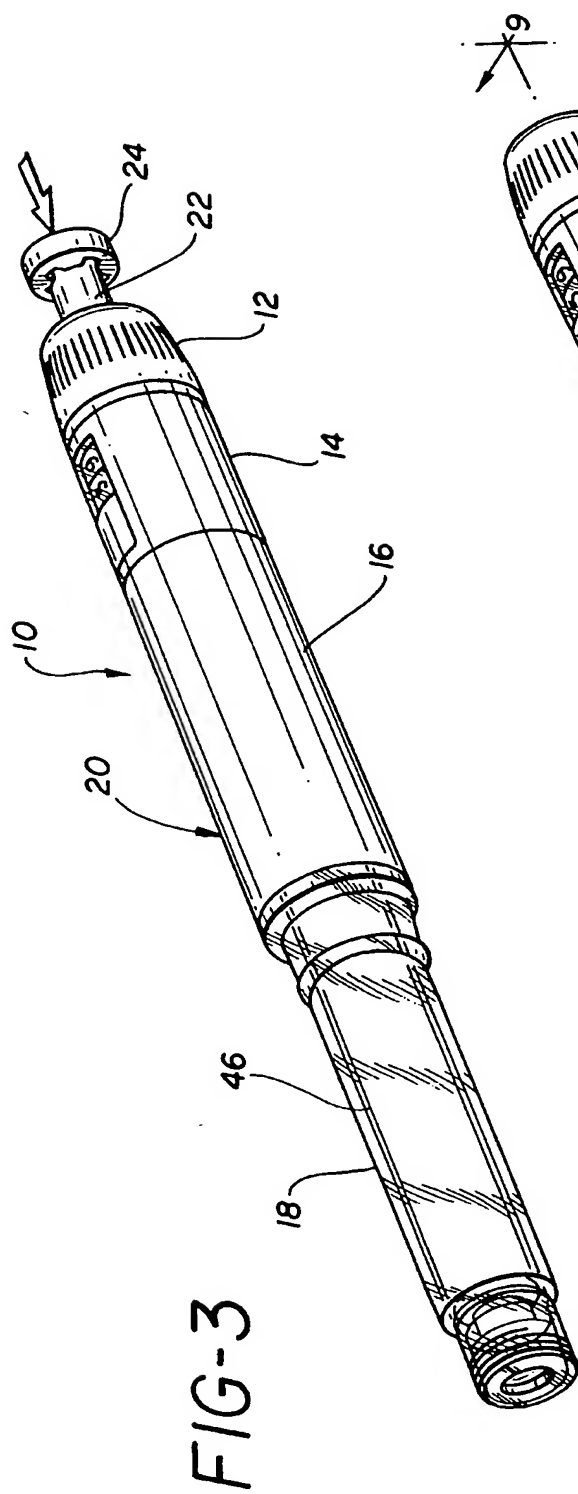
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11.08.93 Bulletin 93/32(72) Inventor: **Balkwill, David**
22 Rue Des Halles
F-44000 Nantes(FR)(64) Designated Contracting States:
DE FR GB IT(71) Applicant: **Becton Dickinson and Company**
One Becton Drive(74) Representative: **Ruffles, Graham Keith**
MARKS & CLERK 57-60 Lincoln's Inn Fields
London WC2A 3LS (GB)(54) **Medication delivery pen with improved dosage setting.**

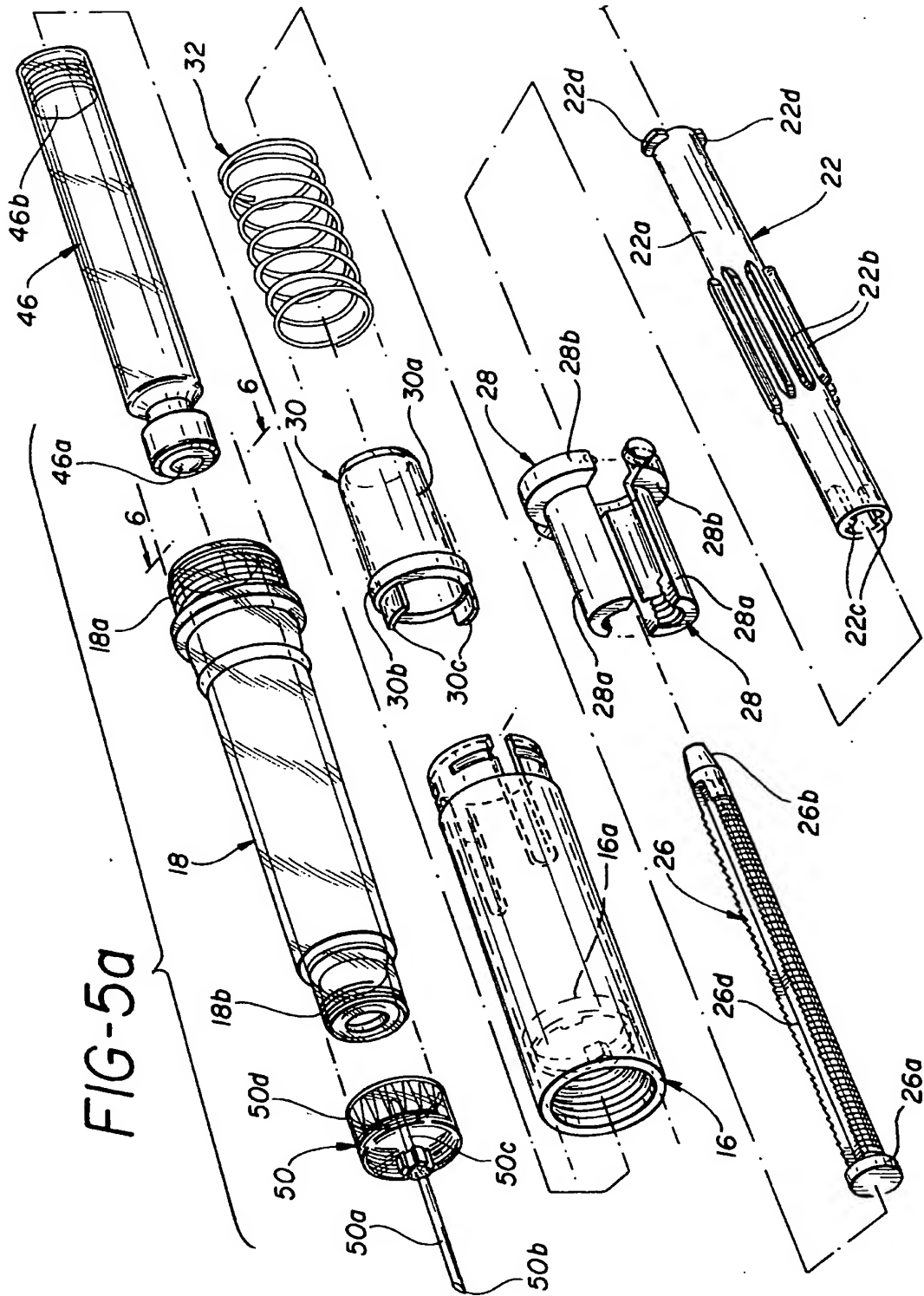
(57) An injection device (10) is provided for injecting fluids such as insulin within body tissue. The device includes a housing (20), a piston rod movably mounted within the housing, and a dose setting mechanism for controlling the movement of the piston rod with respect to a fluid containing cartridge removably positioned within the housing. The dose setting mechanism includes a units counter ring (36) and a tens counter ring (38). A transmission key (44) is provided for selectively coupling the units and tens

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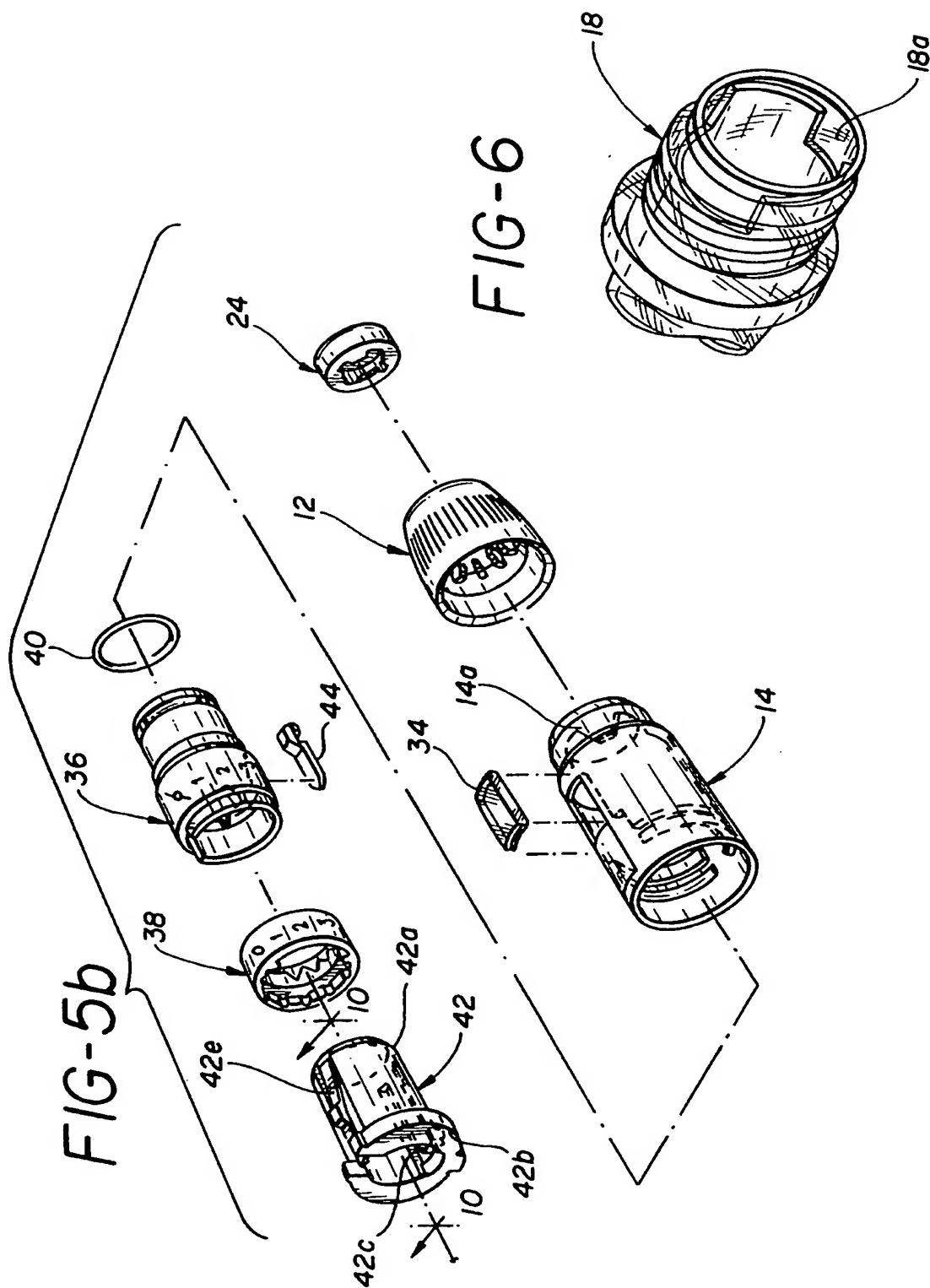


FIG-7

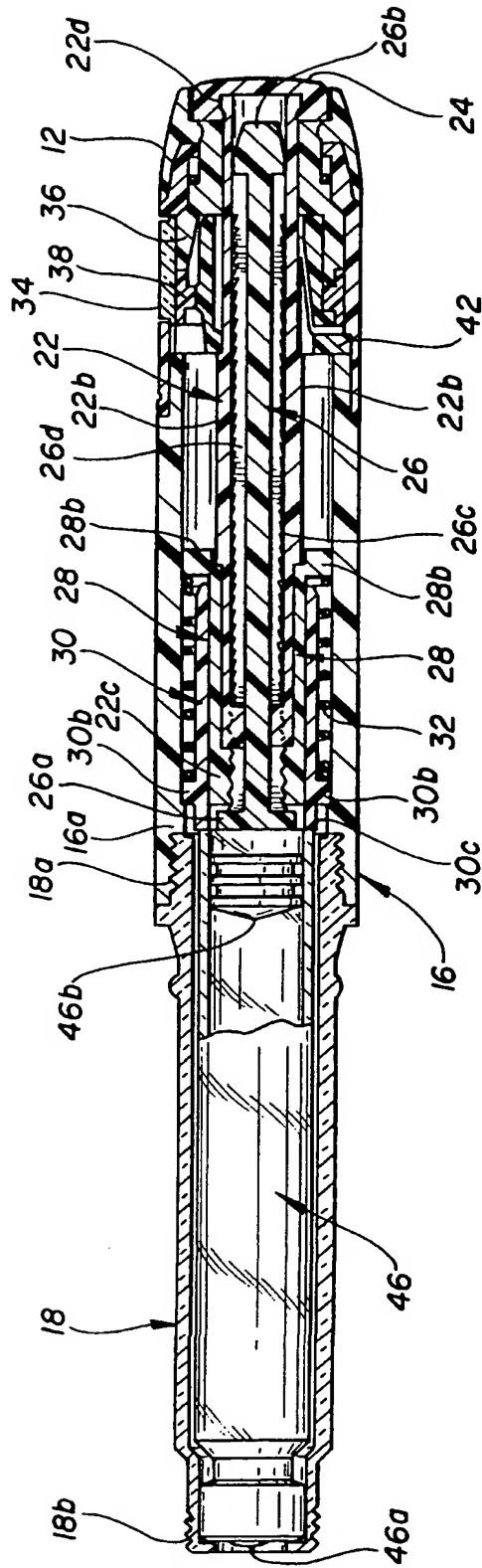
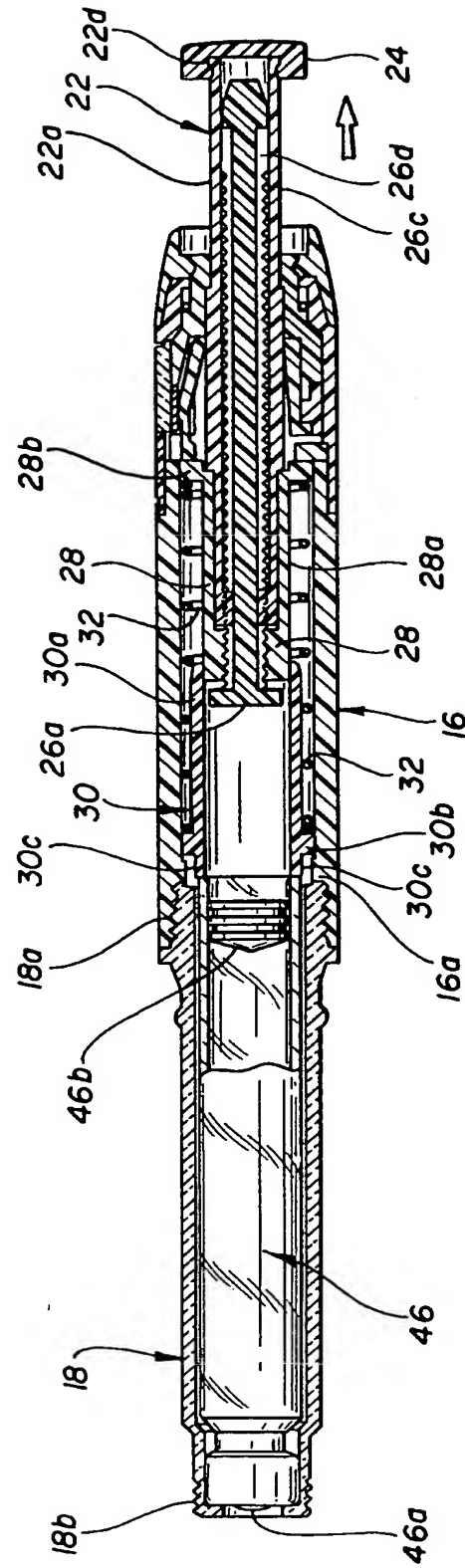


FIG-8



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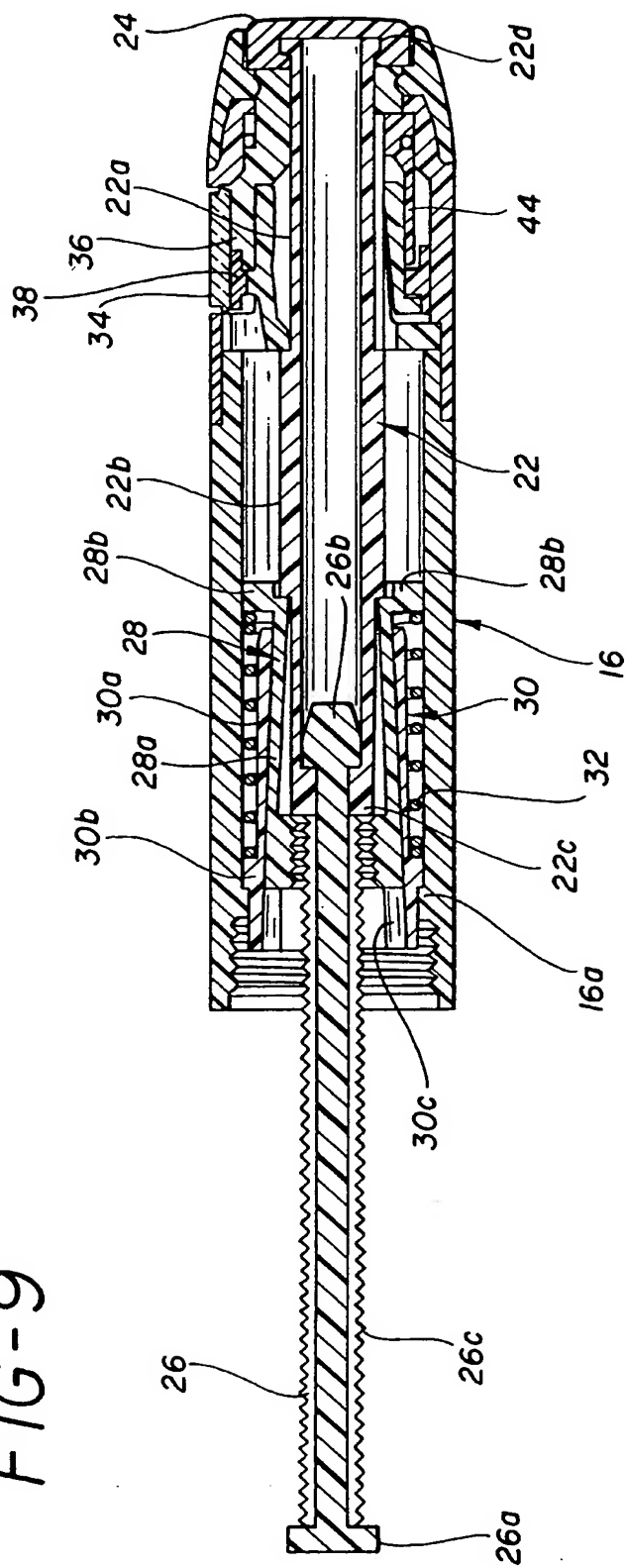


FIG-10

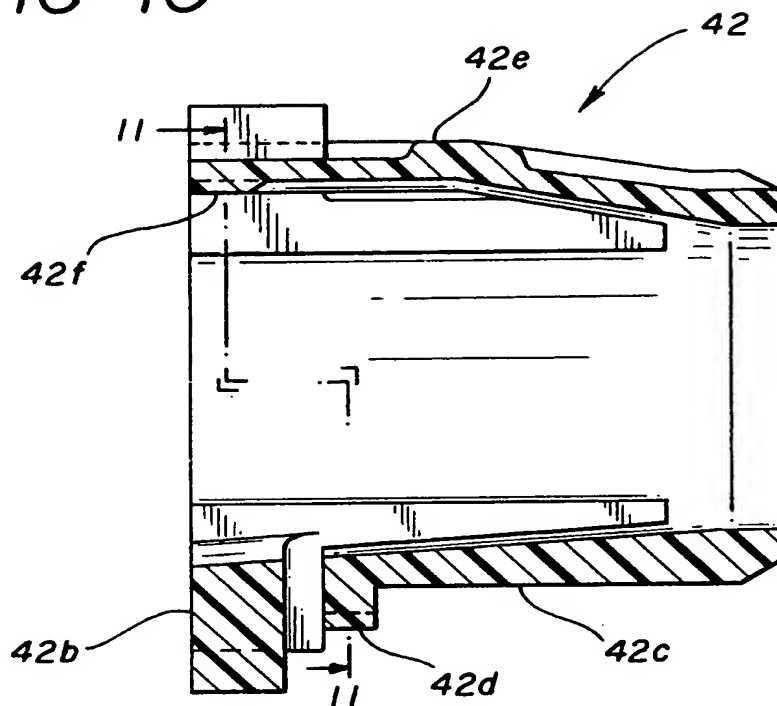


FIG-11

